

SP Alliance & Network

# SP Alumni eNews

September 2024

A man with dark hair and glasses, wearing a blue patterned polo shirt, stands in a hallway. He is looking directly at the camera with a neutral expression. The background shows a hallway with a staircase and a doorway. The image is framed by a red border.

**ALUMNI SPOTLIGHT:  
KEEPING HIS EYE ON  
THE FUTURE OF AI**



## Karthik Prathaban

AI Engineer, AI Singapore.

Diploma in Aeronautical Engineering (2017)

# THE ENGINEER WITH AI DREAMS

**From a childhood love of aircraft to a passion for AI, Karthik’s diverse interests have launched him on a remarkable trajectory. Discover how this extraordinary alumnus hopes to blend engineering and technology to advance AI-driven medical research.**

### Taking Flight

Karthik’s journey began with a childhood fascination for aircraft, nurtured by frequent visits to air shows and hours spent at Changi Airport’s viewing gallery. This passion propelled him to pursue a Diploma in Aeronautical Engineering at SP.

“I’ve always had a fondness for aircraft. I used to enjoy visiting air shows and the viewing gallery at Changi Airport quite a lot. I just had a very big fondness for these feats of engineering.”

### Finding Support at SP

Karthik’s initial days at SP were challenged by a sense of disorientation and self-doubt. Because he entered after his National Service, many of his peers had already transitioned to university, leaving him feeling left behind. However, the support from his lecturers, particularly Dr Erwin Wouterson, helped him find his way.

“Dr Erwin was probably the most influential lecturer I had. He encouraged us to experiment with the equipment in the laboratories and manufacture our own composite parts for our projects. The practical nature of his classes helped me overcome whatever negative sentiments I had.”

### Building on Interests

At SP, Karthik took part in several impactful projects, including the glider construction assignments in the Fundamentals of Flight and Aircraft Structures modules. His team utilised lab equipment like laser cutters and carbon fibre rods to build precision-engineered gliders.

“These assignments were unforgettable. The synergy within the team and the hands-on experience were incredibly rewarding. Even though the gliders didn’t perform perfectly, the process of building them was a lot of fun and highly educational.”

### Broadening Horizons

SP provided Karthik with unique opportunities for international exposure, including trips to Japan that enriched his academic experience and broadened his cultural perspectives.

“Standing at the site of the atomic bomb detonation and experiencing the cherry blossom festival were profound experiences. These trips were impactful both academically and personally.”

### Soaring Higher

Karthik continued his academic journey at the National University of Singapore (NUS), earning a Bachelor of Engineering in Mechanical Engineering and a Master of Engineering in Biomedical Engineering. It was during this time that Karthik’s interest in research and medical science deepened.

“Losing an aunt to liver cancer was a turning point. I realised the importance of medical research and was inspired to get involved. My studies at NUS allowed me to delve into AI applications in medical research, particularly in diagnosing brain cancer in histopathological images using AI.”

### From Aircraft to Algorithms

Today, Karthik works as an AI Engineer at AI Singapore, captivated by the extensive applications AI offers across various fields.

“AI’s versatility interests me. You can apply it to finance, engineering, medicine, and more. In the medical field, AI can revolutionise diagnostics and treatment, improving patient outcomes significantly.”

Karthik also appreciates the open-source nature of AI, which allows anyone with interest and computing power to get involved.

“Anyone can effectively apply AI techniques using resources available online to innovate across industries. It’s an exciting time to be in the field because the potential applications of AI are vast and still largely unexplored.”

### Giving Back and Looking Forward

Karthik is dedicated to giving back to the community and aiding future generations of engineers. He actively participates in dialogues and mentorship programmes, sharing his experiences and insights to guide aspiring professionals.

“Communication skills are crucial, especially in engineering. Being able to present your ideas and understand others’ needs is vital. I advise future SP alumni to focus on building these skills and to remain adaptable in an ever-changing world.”

### Hopes for a Better Future

Looking ahead, Karthik hopes to continue doing what he loves. With plans to further his studies with a PhD, he aims to make significant strides in applying AI to medical imaging and diagnostics.

“I want to contribute to meaningful research that lays the groundwork for future discoveries in medicine. It’s not just about curing diseases right now, but about building the foundations for long-term advancements in medical science.”



Source: Lianhe Zaobao, 24 Jul 2024

### SP Students Apply Sustainability Innovations in Dover Crescent

SP students have “adopted” four housing blocks in Dover Crescent near their campus, applying classroom knowledge to real-world challenges.

The “Adopt a Block” initiative, launched in March by Minister Dr Maliki Osman, encourages students from polytechnics and ITEs to engage with local residents through visits and workshops on water and energy conservation, environmental protection, and greening.

Through this initiative, they’ve developed innovative solutions like smart refrigerators and gardening starter kits to help residents adopt eco-friendly and energy-saving habits, supporting the Singapore Green Plan 2030.

SP is driving this effort by encouraging students to innovate within three key sustainability themes: environmental protection, zero waste, and the green economy. On 24 July, 144 SP students in 24 groups showcased their sustainability projects and research to nearly 40 Dover Crescent residents at the Experience exhibition. SP’s Deputy Senior Director Lim Lee Yee said, “In addition to fostering community awareness among students through home visits, we also ensure that each group consists of members from different faculties, leading to more comprehensive and feasible outcomes.”



Source: Lianhe Zaobao, 29 Jul 2024

### SP Launches New AI Courses to Meet Emerging Industry Needs

In response to the growing prevalence of AI, local institutes of higher learning have introduced eight new AI courses to help Singaporeans meet industry demands.

To this end, two AI-related courses were launched at SP earlier this year: “Building Customised Generative AI Applications on Enterprise Data” in March, and “Machine Learning Using ChatGPT for Manufacturing Industry” in April. These courses are designed to cater to various learning and work needs, offering students tailored opportunities to gain relevant skills.

### SP and TAFEP Partner to Promote Fair Employment Practices



Source: Lianhe Zaobao, 02 Aug 2024

SP hosted the second annual Human Resource Learning Fest (HR Learning Fest) on 2 Aug 2024. During the event, the Tripartite Alliance for Fair and Progressive Employment Practices (TAFEP) signed a Memorandum of Understanding (MOU) with SP to jointly equip students and HR practitioners with the skills and knowledge needed to implement fair and progressive employment practices. This collaboration aims to address the evolving needs of both employers and employees.

SP and TAFEP will also work together to develop short courses on flexible work arrangements for Continuing Education and Training (CET) learners. SP also signed MOUs with six other industry partners to provide students and CET learners with lectures, training guidance, and internship opportunities.

## On-Campus Privileges



Alumni access hours:

#### GYM@POOL

Weekdays : 12pm - 4pm | 6pm - 9pm

Saturday : 9am - 7pm

#### SWIMMING POOL

Weekdays : 9am - 4pm

Saturday : 4pm - 7pm

Please note your SP Alumni e-card and any form of identification is required for verification purposes. SP Sports Facilities may be closed due to curriculum or events without prior notice.



Enjoy Annual Library Membership Fee at a Special Rate of \$40 (+GST) with your SP Alumni eCard.

Library membership is required to enter SP Library.

[Click here](#) to find out more.

#### OPENING HOURS:

[Click here](#) for more information.

## Off-Campus Privileges



### SINGAPORE POLYTECHNIC GRADUATES' GUILD

10% discount for ala-carte menu at SPGG F&B outlets (SPGG Coffee Hub & The Restaurant)

Terms and conditions apply



### THE ESCAPE ARTIST

10% discount for the entire bill

Terms and conditions apply



### PLAY V-ROOM PTE LTD

10% off 1 VR headset per card

Terms and conditions apply



### LAO JIANG SUPERIOR SOUP

10% off total bill

Terms and conditions apply

**SP PACE**  
PROFESSIONAL & ADULT  
CONTINUING EDUCATION

# Reimagine Your Future with our Part-time Diplomas & Post-Diplomas



**October 2024 Intake**  
*Now Open for Registration!*

Stand a chance to receive additional benefits with the SkillsFuture Level-Up Programme:

SkillsFuture Credit (Mid-Career aged 40 and above)  
Top-up of **\$4,000** & UP TO 90% Course Fee Funding

[Click to find out more >>>](#)

**Best-in-Class in Environmental Sustainability and Energy Efficiency - Sustainability Lead**

**1 The Top 100 Award**  
To recognize excellence in the green climate marketplace and to reward and inspire companies, creating industry competitiveness.  
24-25 March 2025

**2 Trip to Denmark (8 days)**  
To learn sustainable and innovative technologies in more advanced industrial and green zones.  
7-11 April 2025

**3 Peak Top 100 Award**  
To celebrate top performing and highly sustainable green and net-zero companies.  
28-30 April 2025

Learn from leading companies who are redefining traditional business models and creating a sustainable workplace ecosystems.

**Experiences from previous runs**

**Click or Scan Here to Register!**

Unlock a green world of possibilities

Unlock a Green World of Possibilities!  
Transform your business with leading-edge sustainability practices. Join us for the Best-In-Class in Environmental Sustainability and Energy Efficiency - Sustainability Lead programme, a holistic learning experience in partnership with Danfoss and Grundfos.

**What you'll gain:**  
Deep insights into global climate impact and business sustainability strategies.  
A 5-day immersion trip to Denmark, exploring cutting-edge innovations in decarbonization and net-zero technologies.  
Practical tools to implement sustainability projects in your organization.

**Key dates:**  
Pre-trip training: 24-25 March 2025  
Denmark trip: 7-11 April 2025  
Post-trip training: 29-30 April 2025

**Why join?**

- ✓ Learn from industry giants.
- ✓ Create actionable sustainability plans.
- ✓ Network with experts and like-minded professionals.
- ✓ Register today and take the lead in shaping a sustainable future: Act now and secure your seat!!!

#SustainabilityLead #NetZeroFuture #GreenBusiness #SustainabilityJourney #EcoInnovation #EnvironmentalImpact

**SP PACE**  
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CONTINUING EDUCATION

Polytechnic & ITE

Calling all Graduates

# Work-Study Programmes

Looking to pursue a **Specialist or Advanced Diploma** and get a head start on your career?

[Click Here](#)

to find out how you can secure good job opportunities and receive **\$5,000 incentive** at the same time!



# Let's Keep in Touch!

Stay notified on the latest alumni events by updating your particulars on the **SP Alumni Portal**.

[Click Here](#)

# SP Alumni eCard

Enjoy exclusive benefits when you apply for your free **SP Alumni eCard** via the SP mobile app.

[Click Here](#)



# CELEBRATING 70 Years of Memories: Call for Contributions

START SEARCHING FOR:

**1 PHOTOGRAPHS:**

Your snapshots from the 1950s to the early 1990s, capturing moments of triumph, camaraderie, innovation, and daily life within SP.



Submit using: Our SP Memories Contribution Form

**2 MEMORABILIA:**

Objects associated with SP life, such as mementoes of significant events.

Send email with a photo of the object(s) to [SP\\_Memories@sp.edu.sg](mailto:SP_Memories@sp.edu.sg). We shall contact you to arrange submission.

Thank you for your contributions that will add to the stories and memories of SP's journey over the years.





# CONNECT WITH US

Education & Career Pathways | Industry Insights | Career Coaching

Email us at [ecg@sp.edu.sg](mailto:ecg@sp.edu.sg) for an appointment

BE

ACTIVE



STAY

VIBRANT



SPGG  
Get Connected, Stay Connected

## NEED SOMEONE TO TALK TO?

Just graduated from SP < 6 months ago and feeling like life's thrown you a curved ball?

Contact our friendly SP counsellors for short-term counselling support if you need.

Email SP: [contactus@sp.edu.sg](mailto:contactus@sp.edu.sg) with subject 'Requesting for Counselling'

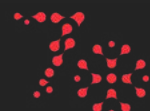


Journeying with you beyond **SP**

Stay Connected @SPANalumni

Interested to partner SPAN? Reach out to us at [SPAN@sp.edu.sg](mailto:SPAN@sp.edu.sg).

**SP** Singapore Polytechnic



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